Family Planning and Health Systems Unit

Improving the Management of Selected Health Commodities at the LGU Level

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IMPROVING THE MANAGEMENT OF SELECTED HEALTH COMMODITIES AT THE LGU LEVEL

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I. Introduction and Background

A. The availability of contraceptives and other essential commodities in local government units (LGUs) is critical, especially in the light of the planned phase-out of donated contraceptives.
B. The decentralization of health services has also brought to the fore the need to systematize the provision of logistics support to national health programs that are implemented in LGUs.

II. Limitations of the Report

A. The present report will focus mainly on pharmaceutical procurement interventions at the LGU level. The related activities of drug selection and use interventions will also be discussed in this report.
B. Distribution or logistics technical assistance will be provided by John Snow, Inc. (JSI) under the DELIVER Project and will only be discussed in passing in this report.
C. The definitions below differentiate between the two activities of the drug management cycle:

    1. Procurement
        a. Procurement is defined as 'the process of acquiring supplies from private or public suppliers or through purchases from manufacturers, distributors, or agencies.'
        b. It includes the activities of 'quantifying drug requirements, selecting procurement methods, managing tenders, establishing contract terms, assuring drug quality, and ensuring adherence to contract terms.'[1]
    2. Distribution or Logistics
        a. Logistics is the 'science (and art) of getting the right amounts of the right things to the right places at the right time.'
        b. It includes the activities of 'clearing customs, stock control, stores management, and delivery to drug depots and health facilities.'[2]

D. The assessments of the existing interventions were based on a review of documents, interviews with key personnel, and the personal experience of the author.

[1] Management Sciences for Health, Managing Drug Supply: The Selection, Procurement, Distribution, and Use of Pharmaceuticals. Connecticut: Kumarian Press, 1997.
[2] Ibid.

III. Format of the Report

Each intervention will be discussed according to the following format:

A. Definition of the intervention
B. Description of current status of implementation
C. Assessment of the intervention
    1. Does the intervention work?
    2. What are its outcomes?
    3. What are the costs?
D. Recommendations for the LEAD for Health Project

IV. LGU Options: Assessment and Recommendations

A. An LGU pharmaceutical management system should achieve the following goals:

    1. To make essential drugs *(FP commodities, anti-TB drugs, and vitamin A capsules)* available to RHU clients.
    2. To ensure that these essential drugs are of good quality and are affordable.
    3. To promote their rational and appropriate prescribing, dispensing, and use.

B. The effectiveness of the interventions was assessed against the above-mentioned goals. The discussion will follow the sequence of the components of the drug management cycle (See **Annex 1**).

C. Selection—Standard Treatment Guidelines (STGs)

    1. STGs are 'agreed-upon treatment practices for a diagnosed illness.'[3] Prescribers use them to ensure that treatments used for diseases are evidence-based and effective. For procurement officials, they simplify drug selection and supply forecasting. By using STGs, quality of care is improved and drugs are made more cost-effective.

    2. The Department of Health (DOH) has written and published STGs for most of its public health programs. These STGs are usually drafted by the corresponding national program offices and are sent to all rural health units (RHUs) for the guidance and compliance of the medical staff. There is no uniform content for these guidelines and, in addition, they exist in different formats (e.g., Administrative Orders, books, pamphlets, and posters). Many of these have not been updated. For the project's priority diseases, the following STGs exist:

        a. Administrative Order (A.O.) 3-A, s. 2000--Guidelines on Vitamin A Supplementation;
        b. Family Planning Clinical Standards Manual (1997); and

[3] Ibid.

c. Manual of Procedures for the National Tuberculosis Program (2001).

Because the STGs have been based on epidemiological studies, they will lead to rational drug use if followed. The problem occurs when medical staff does not follow the guidelines. As yet, there has been no comprehensive study if RHUs are faithful to STGs. However, there are future opportunities to accomplish this: the *Sentrong Sigla* (SS) Phase 2 Level 1 and drug use reviews (DURs, see below).

3. Compliance with STGs can be monitored through the *Sentrong Sigla* (SS) Phase 2 Level 1 Quality Standards List (QSL) and Self-Assessment Tool, in which compliance with STGs is an indicator. At present, the SS assessments have been suspended because of the National Measles Immunization Campaign and the national elections in May 2004. They are expected to resume in June 2004.

4. In addition, DURS can also be used for this purpose. DURs have not been conducted systematically in the Philippines, neither in hospitals nor in RHUs. However, there are trainers in the Centers for Health Development (CHD) who are capable of conducting these DURs.

5. The costs of using STGs in RHUs relate to providing copies of the guidelines to the RHUs and to assessing compliance with the guidelines.

6. As mentioned above, the STGs for the different priority programs exist as separate publications. It is recommended that the guidelines be rewritten to use the same outline format and that they be compiled into one or several manuals. This will provide the staff easier access to the guidelines. It is also recommended that the guidelines be updated, especially the Family Planning Clinical Standards Manual which was published in 1997.

D. Procurement

1. Quantification—This is the estimation of the drug quantities needed by an RHU and is the starting point of the procurement process. This also leads to an estimate of the amount of money needed to purchase the drugs in the required quantities. There are two interventions to quantification:

   a. Morbidity method of quantification
      i. In 1997, the Philippine National Drug Policy (PNDP) developed and distributed a quantification manual for the use of primary health care facilities.[4] It describes quantification based on the morbidity method instead of the consumption method because the lack of stocks makes using the consumption method inaccurate.

[4] The Philippine National Drug Policy, Drug Supply Management and Quantification of Drug Needs for Primary Health Care Facilities. Philippines: Department of Health, 1997.

ii. It is probably not possible to evaluate the effectiveness of this method in the Philippines because RHUs have not used this method for ordering stocks. Instead, RHU quantification is based on consumption. The disadvantages of using this method are that inadequate stocks make the estimate inaccurate and that irrational drug use is perpetuated.
iii. The main outcome with the use of the consumption method in the RHU is that it experiences cycles of overstocking and understocking. This is due to the unpredictable availability of drug funds, to the inadequacy of the funds, and to the irregularity of supply.
iv. The costs of using the morbidity method of quantification is the time spent in performing the computations. However, this time can be reduced through the use of technology. Management Sciences for Health (MSH) has a software called QuantiMed that automates and speeds up the quantification of drug needs using the morbidity method.
v. It is recommended that RHUs be convinced and taught to use the morbidity, instead of the consumption method, for quantification. The use of the QuantiMed should make the use of this method easier.

b. Contraceptive Delivery Logistics Management Information System (CDLMIS)
   i. This is a distribution and logistics management information system, designed by the JSI for the Department of Health (DOH), for the delivery of contraceptives. Only the quantification features of the system will be discussed in this section.
   ii. The information system collects three pieces of information at the RHU and Barangay Health Station (BHS) levels: stock on hand, losses or adjustments, and rate of consumption (or average monthly consumption). This information is collated manually at the provincial level. The forms are sent to the DOH Materials Management Division (MMD) for encoding into the CDLMIS software.
   iii. In the Philippines, it is difficult to assess the effectiveness of the CDLMIS because of the frequent inadequacy of stocks.
   iv. However, because this is a consumption-based method, it, therefore, possesses the disadvantages previously mentioned: gives poor estimates when consumption data is inaccurate and perpetuates irrational drug use.
   v. Assuming that the CDLMIS system is installed at the provincial level, the costs of using the system would include the hardware and software, training of the staff, and time spent by the staff in encoding, processing, and analyzing the information.
   vi. For quantification, it is recommended that QuantiMed be used instead of CDLMIS because of the advantages of the morbidity method.

2. Bulk Procurement

   a. Bulk procurement is the purchase of higher volumes through the pooling of procurement volumes from several local government units (LGUs). Higher quantities may also be achieved by restricting the drug selection list and eliminating duplication within therapeutic categories.
   b. There are several models of pooled procurement:
      i. Informed buying—The LGUs share information about the prices of their procured drugs; purchasing is done individually.
      ii. Coordinated informed buying—The LGUs conduct joint market research and share information on supplier performance and bid prices. Procurement is still done individually.
      iii. Group contracting—The LGUs, through a joint Inter-Local Health Zone (ILHZ) committee, conduct the tendering together. However, purchasing is done by the individual LGUs from the winning supplier.
      iv. Central contracting and purchasing—The ILHZ forms or appoints a central body to do tendering and purchasing through the use of pooled funds. [5]

      The different models are compared in **Annex 2**.
   c. LGUs that are part of an organized ILHZ are the ideal units to practice group contracting and central contracting and purchasing. This is because the Memorandum of Agreement (MOA) that allows them to organize themselves can also be used to form joint tendering committees and central procurement bodies.
   d. On the other hand, LGUs that have yet to join an ILHZ can still practice bulk procurement through informed buying and coordinated informed buying. The LGUs can conduct joint market research and share prices and information on supplier performance. These activities only require that LGUs are willing to share information.
   e. At present, several provinces are already practicing pooled procurement: Pangasinan, Capiz, and Bukidnon. On the average, the cost savings in the first year of implementation is about 50%. The pooled procurement model practiced by these provinces is the *central contracting and purchasing model*. The volume requirements being pooled in these provinces are those of the district hospitals. The Provincial General Services Office (PGSO) performs all procurement functions.
   f. The costs of running a bulk procurement system ranged from very low (negligible paper costs for informed buying) to very high (operating costs for a central procurement body).
   g. It is recommended that LGUs be segmented according to whether they are part of an ILHZ. ILHZ LGUs should be assisted in organizing group contracting or centralized contracting and purchasing. In addition, non-ILHZ

[5] Miralles, M, Regional approaches to health sector goods procurement: Preliminary viability assessment. MSH internal working document for the Rockefeller Foundation service agreement, June 2002.

LGUs should be offered the options of informed buying and group informed buying.

3. Health Plus

    a. Health Plus outlets
        i. The Health Plus outlets are BFAD-licensed drug outlets that serve rural barangays and whose purpose is to make essential medicines accessible, available, and affordable to poor communities. Among other medicines, they also carry FP commodities: pills and condoms. At present, they do not stock anti-TB drugs and vitamin A capsules. Health Plus outlets are operated as social franchises where drug access for clients is traded for profit for the outlet owner, usually a non-government organization (NGO) or a people's organization (PO).
        ii. There are 304 Health Plus outlets present in 11 provinces. They stock the following types of items:
            a) Eight first aid medicines and supplies;
            b) Thirty-eight essential drugs;
            c) Two family planning commodities: low-dose contraceptives and condoms; and
            d) Two herbal medicines.

            They also provide health information on family planning, pre-and post-natal care, immunization, basic home care, first aid, herbal medicines, and referral needs.
        iii. A study conducted by the University of the Philippines demonstrated that Health Plus pharmacy aides, when provided with checklists, could dispense contraceptives appropriately to new users.
        iv. The total cost of establishing a Health Plus outlet is about PhP40,000. This includes the cost of marketing, signage, training in business systems and rational dispensing, and one quarter's supply of medicines. Establishing a provincial pharmaceutical foundation that can support and supply Health Plus outlets at the community level will cost PhP2M.

    b. Health Plus pharmacies
        i. These are full-fledged licensed pharmacies that can carry a complete line of over-the-counter (OTC) and prescription medicines. They are located in the economically depressed areas of cities. Besides contraceptives and condoms, they can also carry anti-TB drugs and vitamin A capsules and become DOTS centers.
        ii. The National Pharmaceutical Foundation (NPF), the primary franchisor, only recently opened the first Health Plus pharmacy in Cavite. There are plans to expand this to other urban areas.
        iii. There are no studies yet on their effectiveness and outcomes.

c. Because of their ability to carry FP commodities, both Health Plus outlets and pharmacies have the potential of increasing access to these supplies. It is recommended that the LEAD Project work closely with the NPF in establishing these outlets and pharmacies in the project sites.

4. Parallel drug imports

   a. Parallel drug importation (PDI) is the importation of a drug product from a third country where it is more inexpensive, usually without the authorization of the manufacturer.
   b. Since 2000, the DOH and the Department of Trade and Industry (DTI) have imported more than PhP100M worth of drug products into the country and have distributed and sold these in more than 70 DOH hospitals and about 40 LGUs. The imports consist of the most popular branded products sold in the Philippines but are sold at half the usual retail price in drugstores.
   c. In a study in Capiz, it was demonstrated that PDI effectively increased the hospital clients' access to medicines by 22% and increased client satisfaction of the prices of their medicines.[6] However, the project has been plagued by occasional stock shortages and a pending legal case filed by multinational pharmaceutical companies.
   d. The outcomes of this intervention are increased patients' access to affordable drugs and increased hospital income. PDI also targets a specific market niche: prescribers and users who seek the quality provided by a branded product and the affordability of a generic product.
   e. FP commodities, anti-TB drugs, and vitamin A capsules may also be procured by the DTI. The additional costs of doing this include looking for suppliers in India (the source of all the previous drug imports). Moreover, there may also be the opportunity costs of lost sales due to shortages.
   f. It is recommended that the Philippine International Trading Corporation (PITC) be requested to import FP commodities, anti-TB drugs, and vitamin A capsules. These products can be sold at government hospital pharmacies, which the PITC is presently supplying. Parallel drug imports can also be sold in private drugstores and in hospital pharmacies for patients who seek branded products.

5. DKT

   a. DKT International is a Washington, D.C.-based charitable organization that implements social marketing programs in nine countries.[7] The DKT program in the Philippines has two major objectives: to increase the trial and continued use of contraceptives by making affordable, high-quality condoms and oral contraceptives conveniently available to low-income

[6] Wong JQ and Punsalan J, Improving Access to Drugs Through Parallel Drug Importation: The Capiz Experience. DOH Policy Forum: Manila, 2002.
[7] http://www.dktinternational.org/default.htm

couples throughout the country and to prevent AIDS through educational campaigns, street theater, and condom promotion in brothels and hotels.[8]

b. Since 1991, DKT has sold more than 103 million condoms nationwide with the introduction of Trust condoms at a retail price of P5.00. In January 1997, DKT introduced Trust pills, a low-dose oral contraceptive manufactured in Germany. In addition, they have sold more than three million cycles in the year 2000. A month's cycle of Trust sells for P20.00.
c. The project's objective is to provide a 'bridge' between the public and private sectors. Their products reduce the demand for government-supplied commodities and, at the same time, demonstrate that, with proper marketing, people are willing to pay for FP commodities.
d. The DKT could be a source of FP commodities for LGU procurement.

6. Drug Consignment System

    a. Consignment is the 'method of assuring availability of stocks wherein a Consignor places its goods at the pharmacy of the Consignee for sale, and the former being paid by the latter for only the actual quantity consumed using the money generated from the sale of the consigned goods within an agreed period of time.'[9]
    b. The consignment system has been implemented in many DOH hospitals. Anecdotal evidence suggests that these have been successful.
    c. The drug consignment system can be used by LGUs to make FP commodities, anti-TB drugs, and vitamin A capsules available in their RHUs without their having to incur initial purchase costs. The medicines can be paid for by user fees, the RHU capitation fund, and/or the PHIC TB benefit package reimbursement (for anti-TB drugs).

7. Government Electronic Procurement System (G-EPS)

    a. Electronic procurement is the use of e-commerce for procurement. The features of the G-EPS include: an electronic bulletin board, a registry of manufacturers, suppliers, distributors, contractors, and consultants, and an electronic catalogue.[10]
    b. Under the new Procurement Reform Act (R.A. 9184), all government agencies are mandated to migrate toward electronic or e-procurement as soon as possible. National agencies were expected to do so in 2003, provincial LGUs in 2004, and municipal LGUs in 2005. However, because of the delay in the awarding of the contract to the company that will manage the e-procurement website, these deadlines have been moved down a year. Thus, provincial and municipal LGUs are expected to do e-procurement in 2005 and 2006, respectively.

[8] http://www.dktinternational.org/Philipines.htm
[9] Department of Health, A.O. No. 5, s. 2003: Guidelines and Procedure for the Institutionalization of the Department of Health Drug Consignment System. Philippines: Department of Health, 2003.
[10] Government of the Republic of the Philippines, *Approved IRR-A of R.A. 9184*. Philippines: 2003.

c. Electronic procurement has many advantages, among which are the opportunity to do national bulk procurement and increased transparency and efficiency. In addition, the electronic bid submission feature will speed up the bidding process and the electronic payment feature of the system will facilitate rapid payment of the suppliers.
d. As the G-EPS for provincial and municipal governments comes online in 2005 and 2006, respectively, it is recommended that the LGUs be motivated to procure their medicine requirements in bulk through this electronic procurement system.

E. Distribution

1. Contract distribution system (CDS)
   a. The contract distribution system is an organized and coordinated method of distributing essential medicines from the DOH to the LGUs through the CHDs. Distribution is accomplished through a contracted logistics company. This system was developed for the DOH by JSI.
   b. At present, the DOH has identified ten essential drugs for distribution through the CDS: ORS, cotrimoxazole, vitamin A, FeSO4, TB SCC I, TB SCC II, ethambutol, streptomycin, chloroquine, and primaquine.
   c. It is not easy to assess the effectiveness of the system because of the frequent supply shortages at the DOH central level. There were no drugs to push through the system. Another problem was that the contract logistics company could not deliver to remote RHUs as it had committed to. Another company eventually replaced it.
   d. A more complete assessment of CDS needs to be done before its use as a system to deliver FP commodities is recommended.

F. Use

1. Drug use reviews
   a. DURs are quality assurance tools used to assess and improve the quality of drug prescribing, dispensing, and use.
   b. At present, DURs have not been conducted in health facilities in a systematic manner. Some district hospitals in some convergence sites have conducted these as part of their therapeutic committee training; however, they have not continued this practice.
   c. When applied in RHUs, they can measure and improve prescriber compliance with standard treatment guidelines for family planning, tuberculosis, and vitamin A deficiency.
   d. Implementing this will require training, as well as close monitoring and audits to ensure that the DURs are being done regularly. However, the benefits of increased quality of care due to improved STG compliance outweigh the costs involved.

G. Management support

1. Organization—therapeutic committees (TCs)
   a. TCs are responsible for formulating drug policy within the institution and for providing advice to relevant departments of the institution. In the ILHZ setting, TCs have a role in adapting STGs and in conducting DURs.
   b. However, TCs will need political support and recognition for them to perform their functions. At present, many hospital TCs are nonfunctional; they are not consulted when selecting drugs for procurement. TCs in ILHZs are practically non-existent.
   c. TCs can assist institutions, like ILHZs, in selecting the right drugs and advise them on their proper use.

2. Financing—revolving drug fund (RDF)
   a. A revolving drug fund is a sum of money that has been set aside for the purchase of medicines and, through user fees or insurance reimbursements, is able to accomplish cost-recovery. The purpose of the fund is to ensure that secure funding is always available to purchase essential medicines. This will allow procurement planning to take place.
   b. RDFs have been used successfully in many LGUs, e.g., Misamis Occidental and Capiz. In these LGUs, the seed money was provided jointly by the DOH and the LGUs. In Misamis Occidental, the purchased drugs were stocked and sold in the provincial hospitals but in a pharmacy that is separate from the hospital pharmacy. This 'public pharmacy' was manned by a separate pharmacist and kept separate accounting and stock records. In Capiz, the purchased drugs were parallel drug imports. They were stocked in all the district hospitals but were kept in the regular hospital pharmacy and were dispensed by the hospital pharmacist. However, separate stock and accounting records were kept. In both situations, a 30% mark-up was used. A strict policy on user fees was enforced such that no drugs were dispensed until they were paid for. The payment for the drugs came from the patients, from PhilHealth, or from the general funds of the hospital. Through this method, the RDFs have not only been maintained but have grown.
   c. An initial problem is where to source the seed money to establish the fund. Later on, measures have to be taken to prevent the fund from being depleted.
   d. RDFs can be used to secure the purchase of essential medicines in RHUs. The RHUs can replenish the fund by using their PhilHealth capitation funds (See **Annex 3**.)

3. Information management
    a. An information system is 'an organized system for collecting, processing, reporting, and using information for decision-making.'[11] It is able to provide vital data in a timely manner for making drug management decisions. This information may include: drug prices, stock inventory and consumption, product quality, and supplier performance.
    b. In the LGUs, this information is not routinely collected, is oftentimes inaccurate, and is not properly analyzed.
    c. The CDLMIS allows the monitoring of stock consumption at the RHU level and the delivery of replenishment stocks directly from the DOH central office.
        i. The goal of the system is to maintain at least a six-month stock level of FP commodities in RHUs.
        ii. Reports of stock levels and consumption of FP commodities are sent by the RHUs to the Provincial Health Office (PHO) where they are consolidated. These consolidated reports are then forwarded to the Materials Management Division (MMD) of the DOH where they are encoded into the CDLMIS software. This becomes the basis for allocation of stocks to the different LGUs. Occasionally, the MMD staff conducts monitoring visits to validate the RHU reports.
        iii. It is difficult to assess the effectiveness of this system since DOH contraceptive supply to the LGUs is meant only to supplement their needs. Sometimes, the LGUs fail to purchase their share of the medicines. At other times, it's the DOH whose supply is short. In addition, since the CDLMIS re-supplies based on consumption, its value in assessing the extent to which the drug needs of the LGU are fulfilled is limited. Also, since the CHDs are not involved in this system, monitoring is difficult and inaccurate data often cannot be validated.
        iv. To implement this system in the RHUs, they have to be supplied with computers, together with the CDLMIS software. Personnel will need to be trained to use the system.
        v. Further assessment of the CDLMIS needs to be done before it can be recommended for use in the provinces.
    d. Drug price comparison guides
        i. Drug price comparison guides compile and collate drug purchase and retail prices of essential drugs across LGUs. The suppliers of these drug products can also be identified in these guides. The objective is to assist LGUs in identifying better sources of drug products and in setting price ceilings for their tendering.
        ii. The National Drug Policy Staff (NDPS) has started compiling drug prices for selected essential drugs from all the country's regions. The drug prices come from the regional hospital, a selected provincial hospital, and a large private drugstore. Procurement offices can use these prices to determine whether or not they are getting the best prices.

[11] Management Sciences for Health.

iii. However, collecting and compiling these prices may be difficult and time-consuming. The prices may, thus, easily become outdated.
iv. A drug price comparison guide that includes the names of the drug suppliers can be developed to provide price information to the project LGUs.

4. Human resources—training
   a. To install these interventions in the LGUs, capability building will be required. The following knowledge and skills need to be learned:
      i. Adoption and compliance with STGs
      ii. TC functions
      iii. Conduct of DURs
      iv. RDF management
      v. Management of pooled procurement process
      vi. Health Plus outlet management
      vii. CDLMIS operations
   b. The objective of the training is to enable the LGU personnel to effectively perform the new tasks. To be effective, the trainings need to utilize the principles of adult learning, i.e., they need to be participatory and interactive.
   c. The acquisition of the new knowledge and skills by the LGU staff need to be done through the use of several methods, not just workshops. Other methods may include: manuals, websites, and mentoring by the SIOs and the field coordinators.

H. Policy and legal framework

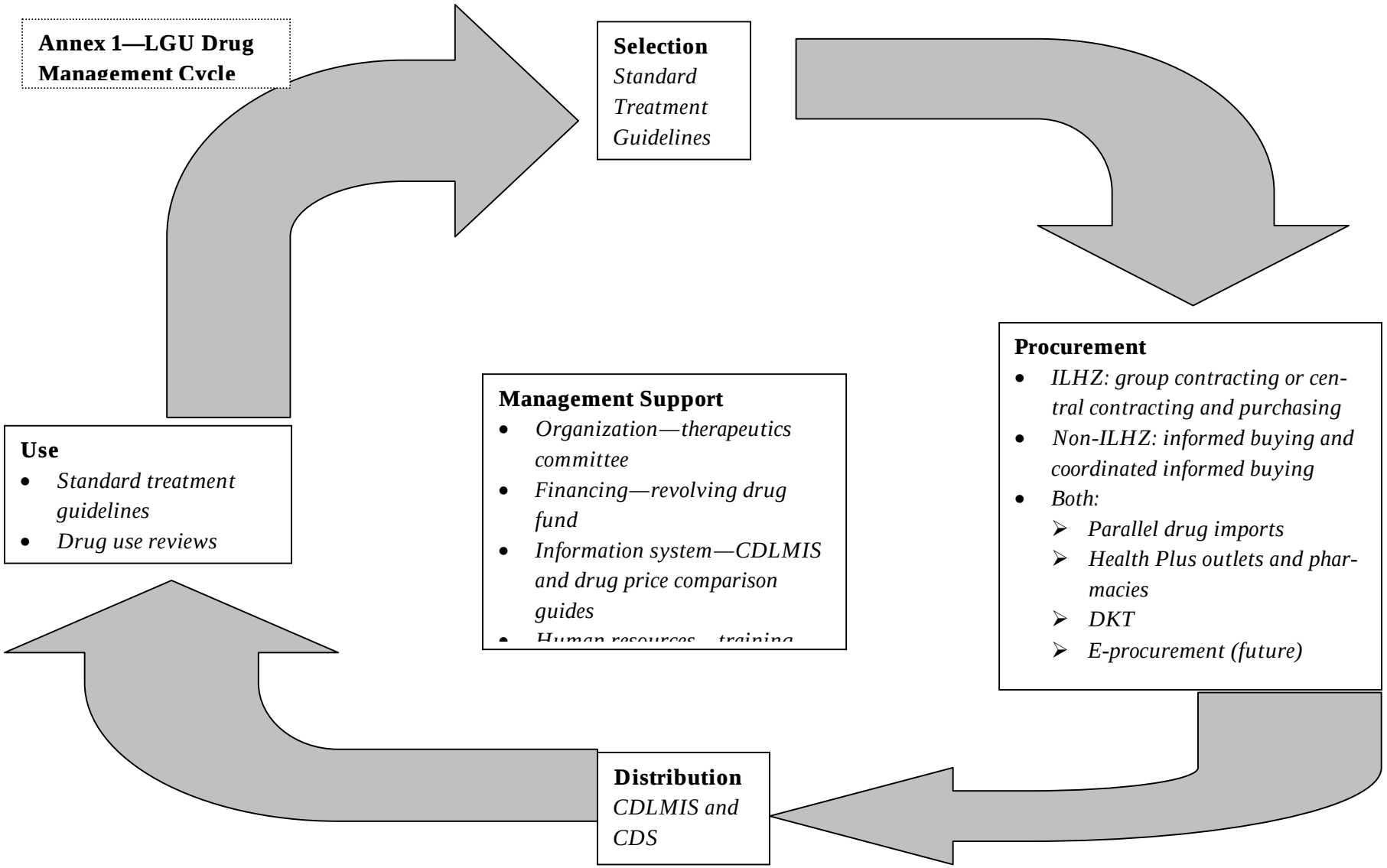
1. To accomplish the above interventions, several policies, resolutions, and ordinances need to be put in place. These may include policies and local laws on:
   a. ILHZ Memorandum of Agreement (MOA) for group contracting, central contracting and purchasing, and coordinated informed buying;
   b. TC to assume the role of technical committee for bidding and awards; and
   c. Appropriation of RDF.
2. These policies and laws are needed to provide the implementers with sufficient authority and guidelines to perform their tasks.
3. The enactment of these policies and local laws may take time.
4. The Policy Unit needs to develop a list of policies and local laws that are needed to implement the above interventions.

V. Summary of Recommendations

The model LGU pharmaceutical management system starts with selection of the most effective treatment for the target conditions. This should be undertaken using evidence-based and critically appraised **standard treatment guidelines**. The selected drugs then become the basis for **bulk procurement** through one of several models: informed buying, coordinated informed buying, group contracting, central contracting and purchasing and **electronic procurement**. The sources of medicines for bulk procurement could include **parallel drug imports and the DKT**. **Health Plus outlets and pharmacies** are another source of quality FP commodities at low cost. They are also effective means of distributing the commodities. Medicines that are bulk-procured at the central level may be delivered to the RHUs through either the **CDLMIS or CDS system**. When the medicines arrive at the RHUs, the ILHZ TCs using drug use reviews can monitor their use. The purchase of these drugs could be financed by a **revolving drug fund** that would be reimbursed using the RHUs' capitation fund. The **CDLMIS** will provide feedback information on the RHUs' inventory status. A **drug price comparison guide** will help the different LGUs assess the efficiency of their procurement process. Personnel who are involved in this system should be properly **trained** to assume their responsibilities. Finally, appropriate policies are needed to facilitate the implementation of these interventions.

ANNEXES

Annex 1—LGU Drug Management Cycle



Annex 2—Models of Pooled Procurement[12]

Label	Informed Buying	Coordinated Informed Buying	Group Contracting	Central Contracting and Purchasing
Description	• Members share information about prices and suppliers • Members conduct procurement individually	• Members undertake joint market research, share supplier performance information, and monitor prices • Members conduct procurement individually	• Members jointly negotiate prices and select suppliers. • Members agree to purchase from selected suppliers • Members conduct purchasing individually	• Members jointly conduct tenders and award contracts through an organization acting on their behalf • Central buying unit manages the purchase on behalf of members
Supplier Selection & Price Negotiation	• Individual	• Individual	• Group	• Group
Regional group roles & responsibilities	• Facilitate the gathering and dissemination of supplier and price information among members (clearing house) • Simple sharing of information	• Forum for harmonization of information requirements and systems; mechanism for market research, dissemination of findings among members, and potentially, provision of drug information • Focus on coordination of information gathering and sharing	• Country delegates meet to jointly conduct price negotiation and supplier selection on behalf of members. Alternatively, an agency may be contracted for this purpose.	• Contracts with a jointly designated central buying unit to conduct and adjudicate tenders
Central Unit (DOH or more regional) roles & responsibilities	• Share procurement information for selected items	• Collect information related to pricing and supplier performance based on harmonized requirements; provide resources to conduct joint market research activities for selected items	• Provide accurate and reliable quantification of needs for selected items • Provide timely payment to suppliers • Provide accurate and reliable information on supplier performance and product quality monitoring	• Provide accurate and reliable quantification of needs for selected items • Provide funds to procurement unit/agency for supplier payment • Provide accurate and reliable information on product quality monitoring

[12] Miralles, M, Regional approaches to health sector goods procurement: Preliminary viability assessment. MSH internal working document for the Rockefeller Foundation service agreement, June 2002.

Annex 3—Flow of Money and Medicines in a Revolving Drug Fund System